



Lynx.

High Performance Single Board Computer

AI | Visual Navig. & Auto Control |
Software Defined Radio | Payload
Computer | Image Processing &
Compression | Manned space,
LEO, GEO & Deep space

Lynx is a high performance general purpose single board computer, designed for critical tasks in a harsh radiation environment, with flexible communication, interface and mass storage capabilities. The processing capability is provided by the quad core ARM processor delivering more than 30.000 DMIPS / 45.000 CoreMarks. The IO capability is implemented in a reprogrammable FPGA allowing late tailoring to a specific programme need without hardware redesign.

Beyond Gravity Space heritage

- >3000 failure free equipment years in orbit
- >300 Launcher On-Board Computers
- >120 Satellite Data Handling Systems

Applications include

- Artificial Intelligence
- Software Defined Radio
- Image Processing and Compression
- LEO, MEO, GEO & Deep space
- Telecom satellites
- Visual Navigation & Autonomous Control
- Payload Computer
- Manned space

Key features

- Quad core ARM processor
- >30.000 DMIPS
- Up to 8 GiByte DDR4 processing memory with ECC
- Up to 44 GiByte Flash memory with ECC
- High-performant rad-hard FPGA
- Flexible and scalable FPGA framework
- FPGA IPs available for various functions
- 512 MiByte DDR2 FPGA memory with ECC
- Fault mitigation support by FPGA
- High-Speed Serial Links (SERDES) 2.5 Gbps
- Ethernet, UART and JTAG for SW development and test
- Flexible Mezzanine board interface
- Designed for 15 years in GEO orbit
- Form Factor: 6U SpaceVPX standard (VITA 78)
- ITAR free
- Component quality: ECSS Class 1, MIL Class Level S or equivalent
- Board support package for VxWorks. Support for Linux, PikeOS or RTEMS can be provided upon request
- Operating system independent boot and driver software

Availability

- Qualification model in development
- Development kit available now
- Prototype boards for early development available upon request

